AMENDMENTS TO THE SPECIFICATION:

On Page 6 please replace paragraphs 3 and 4, lines 7-23 with the following amended paragraphs.

According to the present invention, Gamma correction of an EL panel is conveniently effected at the D/A conversion stage of a gray scale driver by replacing the conventional linear voltage ramp with a ~~special 'double-inverted-S'~~ non-linear voltage ramp.

Thus, a gray scale reference voltage generator is set forth herein that employs a non-linear voltage ramp in combination with a counter and a sample-and-hold circuit to achieve digital data to gray level conversion with proper Gamma correction. The shape of the voltage ramp is defined to generate gray scale levels according to ~~equation 1~~ Equation 1 taking into account the shape of the luminance versus voltage curve for a pixel, as shown in Figure 3 for a thick dielectric electroluminescent display. The optimum curve of the voltage ramp therefore has ~~an inverted s-shape, with~~ a convex shape (negative second derivative with respect to time) for an initial portion of the voltage range and a concave shape (positive second derivative with respect to time) for the remaining portion of the ramp to maximum luminance. The non-linear voltage ramp of the present invention permits the use of a clock that is required to delineate only 256 time intervals for fully defining 256 gray levels. The voltage ramp also simplifies the process of generating a Gamma corrected gray level voltage at the driver output in accordance with gray level data from the incoming video signal.

On Page 9 please replace paragraphs 3, lines 14 -25 with the following amended paragraph.

A successful prototype of the ~~Double-inverted-S Ramp Generator~~ voltage ramp generator is shown in Figure 7. The dashed line blocks represent circuitry that provide the functionality of the blocks in Figure 6. This circuit also includes control inputs for independent adjustments of three critical parameters for each of the non-linear ramps for both negative and positive row polarities, and also the timing for automatic switching

between the two non-linear ramps as controlled by the frame polarity synchronization pulse from the display system. The three critical parameters are the curvature of the first segment of the non-linear ramp (adjusted through R15 and R16 of Figure 7), the transition voltage level for switching between the two non-linear ramp segments (adjusted through R9 and R10 of Figure 7), and the curvature of the second segment of the non-linear ramp (adjusted through R5 and R6 of Figure 7). A ramp reset signal derived from the system control electronics is used to reset and synchronize the non-linear ramp for every scan cycle of the display.